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Agricultural.

SHORTHORN CATTLE.

Eleventh Annual Meeting of Michigan Breeders. They are cheerful if Values are Low—Prospects Regarded as Favorable for Good Cattle.

The Eleventh Annual Meeting of Michigan Shorthorn Breeder Association opened at Lansing on Thursday Dec. 18th, with the President, Mr. John McKay, of Romeo, in the chair. After the meeting had been called to the President read his annual address, which we give in full:

The past year has not been an eventful one in history nor have the interests of agriculture and the welfare of our hopes and desires of one year ago. Mother earth in our commonwealth has not yielded abundantly of her treasures, to the labors of the husbandman, nor has the price of the stock and produce of the farm been as remunerative as we could desire. But when we consider that all other branches of labor in other vocations of life meeting with no better success, we are led to the conclusion that we may be passing through a periodical business depression, which affects all trades and callings alike.

The time has been when the average farmer was content to plod along in the old beaten path of his ancestors, regarding every means to improve old methods with suspicion and distrust, protesting against all modern inventions, and clinging to his old ways. The old divines who opposed the introduction of farming trials in Scotland is said to have denounced the innovation in no uncertain terms. "We used to trust to Providence," said he, "for wind to fan our grain, and it is not wicked presumption thus to interfere with the divine prerogative wind for ourselves." But those days of superstition and ignorance have long since passed away, a new era has dawned, and now most important of all, the agriculturist, the one upon whom all others are more or less dependent for success, is receiving something of the attention which his importance demands. The agriculturists of to-day are making rapid advancement in agricultural science, and availing themselves of every means and opportunity to advance their interests.

The associations and surroundings of rural life, when properly enjoyed, and duly appreciated, can never be rivaled by the avocations of the town. But there is, and probably always will be, a time of time, discontent in every avocation of life, and the desire to be a farmer, for he believes that he has but to sow, that he may reap untold wealth from the bosom of Mother Earth; the lawyer would be a doctor, and with his pills and powders win fame and wealth at the bedside of suffering humanity; the doctor would be an editor, and win fame with his pen; the farmer would be a merchant, then he would be on the road to wealth and ease. The world moves on, and it will ever be thus, in every vocation, but let us be sure, that we believe the life of the agriculturist to be more healthful and satisfactory in the long run than the trades and professions, and he who has passed life's meridian will never feel that lasting love for home in town, no matter how beautiful it may be, but he will always feel swelling up in his heart a love for the old country home. How often in life after the shadows begin to lengthen do we find ourselves recalling the pleasant memories of the old country home made halcyon days—such associations, and in no other place will you find all these pleasant experiences except in the home life of the husbandman.

But it is not with the past, but with the active, restive, and bustling present, that we have to do, and the agriculturist is beginning to see the need of taking a broader view of life, and the necessity of being up and doing it. He keeps pace with others in life's battle. He is keeping his influence by organization and otherwise; and to some extent is taking his justly entitled position in the affairs of the nation. But how often have we seen him, through the influence of the politician and the press, taking a position in affairs directly opposite to his own interests for want of a little study and research, and the faculty of thinking, and deciding for himself. And we believe that the present need of the agriculturist is to obtain the largest success in his calling, making his influence felt among men, and taking such a place in the affairs of life as the importance of his calling should warrant.

He is a broader and more liberal education. Taken as a whole men have long adhered to the fallacy that no special education or training was necessary for a farmer; no special training of the mind, no education required

to make a successful agriculturist. He may be a good man in society, and have the good will and respect of his neighbors, but his influence will be in direct ratio to his intelligence, and intelligence demands culture and education. To develop brain power we must use it, and it cannot be used effectively without education. The fact is well known that farmers do not, as a class at the present day wield an influence in the affairs of life in proportion to their numbers and the importance of their calling. For this they, and they alone, are to blame.

Agriculture to be successful must be made pleasant and profitable, but every rose has its thorn, and we know of no country where the tiller of the soil does not meet with more or less to annoy and perplex. The laws of compensation and cause and effect hold good everywhere. It has been truly said, "he there is no greater profit in the world so many of the conditions of success and failure are unforeseen and beyond our control. The carpenter, the mason, the machinist, the blacksmith, can each tell you at what price he can perform for you a certain price of work in his own line, but which one of you can tell what it will cost to raise a bushel of wheat, or corn, or at what price you can afford to sell a pound of beef, a year hence?" There may be a sort of general average, which is obtained from year to year, found by comparing a long series of years together, but for one particular year one can predict the yield of his farm.

The same reasoning holds good as to the proceeds we shall receive for a year hence, the price of our products. Truly it can not be said that it has been so with that branch of agriculture which this association represents. One year ago we believed that we could discover the silver lining to the cloud that enveloped us, and hoped for better times, but that has hope ended in fruit? The herds of the prairies, the valleys and the hillsides, have continued to pour into the markets of the country, in countless numbers and beyond all former experience, without regard to demand, condition, age or price, until the time cannot be distant when the demand will exceed the supply, and stock raising again placed upon a paying off.

My official duties as president of this Association are now drawing to close; the associations have been pleasant indeed and will ever be remembered by me with pleasure, and I take this opportunity of thinking you all for your many acts of kindness and courtesy to me while acting as your presiding officer.

Secretary Butterfield read his report which was as follows:

The expenses of the past year were \$11.25; Secretary's salary, \$25; total, \$36.25; membership fees received, \$35.

I have to report that the State Agricultural Society accepted the proposition of the Shorthorn Association and offered prizes for the best cattle at the fair in October. Mr. Wm. Gaffey, of Bay City, competed for this prize with his cow Mrs. Rose, Vol. 35, and received the first prize with a test of a tare over two pounds of butter in 24 hours.

The test was under the direction of the Superintendent of the Cattle Department.

The Treasurer's report was as follows:

Received from membership fee, \$35. Paid for stationary, printing, etc., \$5.50; expenses of Secretary, \$3.75; salary of Secretary, \$25.75; total, \$35. This left a balance due the Secretary of \$1.25, which was paid him, from back memberships received from John Thoburn and C. F. Moore.

The first paper on the programme, "Right Selection the Natural Means of Improvement," was read by Prof. Eugene Davenport, of the Agricultural College. It, with the discussion upon it will appear hereafter.

Mr. Clapp followed with a paper entitled "How to Breed Shorthorns." Mr. Clapp said:

Passing, as we are, at the present time, through a period of depression, with a stringent money market in the east, a large supply of cattle in the west, and the price of that supply, too, controlled largely by monopolists, we do not anticipate that we shall be able to stir up much enthusiasm; but by some ideas that we shall present we hope to provoke discussion that will bring out information on this subject sufficient to repay the trouble of coming together.

Then has been three distinct methods adopted in the past, namely: 1st. Inbreeding or out-and-out breeding; selecting non-relatives and coupling male and female so as to correct defects in one by the superior quality of the other. 2nd. In-breeding; selecting male and female closely related and coupling purporting to concentrate the desirable qualities of the individual animals and produce refinement. 3rd. Line breeding; selecting male and female related, but not closely of same tribe, and carrying a large percentage of same blood drawn through different channels of relatives and continuing the process for several generations without the introduction of alien blood, or blood from other tribes of the same breed. All of these methods have their adherents who contend that theirs is the best, but for us to give a detailed account of the results to prove the superiority of one above another would require more space than we have to devote to this topic. It is sufficient to say that the first mentioned method is the one most universally adopted by beginners and the general breeder. The second we believe is a dangerous one to follow, except by men of superior judgment and large means, who can afford to sacrifice several animals in the process of producing a superior one. The third method, with numerous variations, is the one most frequently adopted by the professional breeder.

No matter what method one may choose to follow, judicious selections to start with is indispensable to success. Building from low foundation, too many have found to their sorrow to be a slow process. We believe that all close observers discover, very soon, that there is a tendency in any breed of improved stock to revert back to the original type and characteristics of the ancient stock,



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and it is by the same process of care and habit by which the stock was improved, that it can be held to its advanced condition. Hence it must be admitted that the farther we are removed, or in advance of the original defects of the breed the less liable we will be to combat with that tendency to revert.

The animal descending from stock

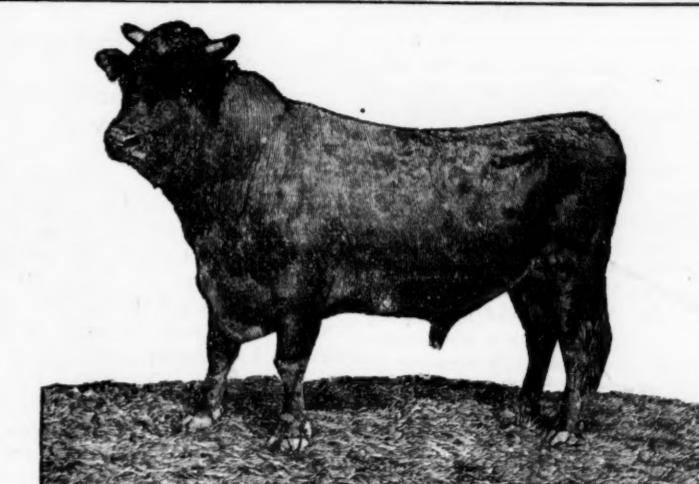
that for many generations back has been of a high or superior class in general conformation and habit, will more easily sustain the characteristics of the family and more surely transmit the same to the offspring. Arguing from the above conclusions and we believe all will admit that they are correct, pedigree and individual merit are the first two considerations in laying the foundation for a herd. When the breeder has decided which tribes he will select his females from, then if his purpose is sufficient, he can select the best specimens of the tribes chosen and those that descend through a long list of merit ancestors. Having secured the females that will be taken very cautiously, that of selecting a bull. As the bull represents one half of the herd in breeding, he should, if possible to obtain such a one, approach closely to perfection in general conformation, and the closer he approaches perfection the more valuable he will be, providing his pedigree shows that he is of lineage highly meritorious for several generations back. In other words, he should be a noble son of noble parents.

Having secured the foundation for a herd, next comes the test of the ability of the breeder to not only maintain the excellence of his herd, but to improve it in quality and style. Uniformity in the produce, providing it is coupled with true excellence, is one of the things most desirable, and it requires skill and practice to approach it.

Having begun the business of breeding one should have an ideal Shorthorn in mind, and seek by his selection of bulls for successive generations to reach that ideal. With a fixed purpose and inexhaustible zeal and energy, one can succeed in approaching his ideal; but if lured by the foolish whims of fashion in by and forbidden paths, the ever changing disposition of the goddess of fashion will compel him to contradict his own works, constantly change his plans and land his business a hopeless wreck on the shoals of disaster.

We believe that he who breeds a general purpose animal will succeed best. As it is the general farmers that the breeder has to look to for customer, it is matter of importance that the Shorthorn should be so bred as to meet his demands. The average farmer can not afford to keep single purpose cattle any more than single purpose horses. The most desirable Shorthorns are those that yield a large quantity of milk and in the end a good carcass of beef. The milking qualities of the Shorthorns have been so much neglected for the last twenty years, that it is not strange that other breeds have been sought to supply this want; and unless vigorous efforts are made in the future to improve their milking qualities the Shorthorn breeders will lose ground that they can not well afford to lose. It was for their superior milking qualities that the Shorthorns were first noted, and I know by experience that the quality can be gained by judicious selection and handling. In the selection of bulls for the purpose of improving the milking propensity of our Shorthorn, the conformation of the dam of the bull as well as performance at the pail should have due consideration. For us, we prefer a finehead, small neck, that is not very long and that molds smoothly into the fore quarters that should be both deep and of good width, a broad loin, good length of hip, a well developed udder; and, above all, of quiet disposition. And the character of the dams of the sires for several generations back should be given due consideration. If these ideas were maintained for three or four generations we would hear less complaint that the Shorthorn is not the farmer's cow.

If we are content to breed cattle that are only useful as beef animals, we must admit that we are willing to engage in a business that does not, at the present time, pay expenses. A good milking cow will bear cost of keep and in the end yield a good carcass of beef worth double that of the native, thus giving a farmer two sources of revenue. If we cannot maintain the Shorthorn as a general purpose animal, we must admit that the breeders of a century ago were ahead of us, and we as breeders are a failure. Single purpose cattle can be found among other breeds, and if we wish to divide the patronage of the public with the breeders of other cattle, we can follow the single purpose line; but if we wish to not only maintain the former characteristics of the breed, but



IDA OF ST. LAMBERT'S BULL 19169.

improve upon them, our first endeavor will be to make the good old Shorthorn both the champion at the pail and the shambles.

Mr. M. A. Snow, of Kalamazoo, followed with a paper on "Feeding Shorthorns," an excellent one, and received with general commendation. Then W. E. Boyden, of Delhi Mills, told "How to Show Shorthorns," and gave the boys several good points to consider. For the wind-up Mr. Wm. Ball had a paper on "How to Sell Shorthorns," and he had only to draw on his own experience for an ample fund of information on that important part of the business. These papers were all well discussed, and will be published hereafter.

The election of officers then came up and resulted in the choice of the following: President, W. E. Boyden, Delhi Mills; Vice-President, A. F. Wood, Mason; Secretary, I. H. Butterfield, Port Huron; Treasurer, Robert Gibbons, Detroit; Directors, O. S. Bristol, Almont, F. J. Fishbeck, Howell, M. Kelly, Woodstock.

Mr. Goodwin, said if the Secretary had known how much effort he had expended in the way of violent exercise and attention to diet to reduce the size of his shadow he hoped referred to would not have been presented.

However he was thankful for the kind intent expressed thereby. The *Gazette* would always be found the champion of the stock growers as it saw its duty, defending them alike from enemies and unwise friends.

Mr. Hinds said the Sanitary Commission

had found many difficult questions to deal with, but he believed the Commission had been able to do great good to the cattle growers in keeping contagious disease from them and they would continue to use their best judgment in the conduct of the work entrusted to them.

Pres. Clute said the board and faculty were desirous of strengthening and developing the Agricultural department at the college, and of increasing the fame of the College as the best of its kind in the country. This would be his endeavor so long as he remained at its head. He wanted to meet the farmers and stock growers of the State at the College as frequently as possible, and receive from them advice, and also criticism when needed. He referred to a criticism he sometimes heard that the graduates did not become farmers, and said while all did not, a goodly number are engaged in that calling and their influence is greatly felt. Many more, like his former, pupil Mr. Baker, after making a name in some other profession, had finally turned their attention to agriculture, showing that their early training had not been entirely forgotten.

Mr. Sotomayor was not present but sent a letter of regret: "When the White faces and the Shorthorn join hands, uniting the best qualities of both, they are incomparable. He would join hands with the Shorthorn breeders in driving out their common enemy the Scrub."

Mr. Wickes acknowledged that the Galloways had some faults, chief among which was that of strongly impressing their character on the grades when crossed on the common stock.

Judge Marston sent his regrets in a letter read by Secretary Flint. "A good herd of Jerseys makes more than double the average amount of butter per cow, and the butter brought the best price, hence greenback harvests."

Mr. Saxon said their favorite breed had enabled the Dutch farmer to pay his high rents to other stock could, and that with judicious care they would help the American farmer out of many difficulties.

Mr. Barnes said the pix was indeed a competitor of the Shorthorn, in furnishing food for the world. Everywhere was found a demand for lard and ham sandwiches, and if some of the lard went into butter, making the swine breeders not responsible for it.

Mr. Rich said the Merino sheep breeders were enterprising, aggressive, intelligent. They had succeeded in greatly increasing the capacity of the Merino for wool and mutton both. Through prosperity and adversity they had kept improvement steadily in view until now the American Merino stands without a peer as a profitable wool producing sheep; and Michigan breeders are not second in the race.

Mr. Ball was glad to see an organization, of all stock breeders, believing that it would do much to increase the live stock interests of the State.

The demand for good mutton was greatly on the increase and the time would soon come when "choice shropshire mutton" would be found on the bill of fare of all "first class" hotels.

Mr. Ball spoke of the meeting when less than a dozen breeders met to organize this Association. The cattle business has been depressed of late, but the Shorthorn had steadily increased in numbers, and still equalled the number of all the other purchased cattle in the State. The Association had done much for the interests of Shorthorn breeding and much for breeders themselves. It had increased confidence and friendship among them and many more acquaintances had been cemented into friendship that would last through life. If there were no other reason for its existence this would be enough.

Mr. Baker said that proper care in breeding and intelligent methods of feeding this State could compete with any section in cattle growing. He advocated only the use of pure-bred animals, and believed they would bring the most revenue, even for the practical purpose of making beef.

Mr. Johnson said of the FARMER that he was not like a large class of the so-called agricultural papers, agricultural only in name, but that its editors endeavored to rep-

resent the true interests of the farmers of Michigan; and he hoped that in the future they would receive even more substantial remuneration than in the past, from the stock growers.

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This closed the programme, and the Association adjourned to meet at Lansing in December.

Dec. 27, 1890.

The Horse.

St. Jo and Duke of Crawford.

HOLLY, Dec. 21st, 1890.

To the Editor of the Michigan Farmer.
Will you please give S. J.'s pedigree, and some information regarding him, his time and birth date made by his get. Also Duke Crawford's pedigree (owned at Farmington) or any information regarding him. Has he any in the 2:30 list? Please answer through the FARMER.

A SUBSCRIBER.

St. Joseph or St. Jo, bay horse, foaled in 1890, bred by Dewey & Stewart, Owosso, Mich., sired by Jo Gwin 584; dam, Owosso Belle (dam of Cora Belle, 2:29½), by Louis Napoleon 207; c. dam, Crazy Jane, by Selp Printer. He is standard under Rule 6, and registered, his number being 383. St. Joe was at one time owned by Dr. Gilchrist, of Pontiac, the owner of Elmwood, by Louis Napoleon. He was first recorded in Vol. 4 as Newton McBain 1884. He is not in the 2:30 list.

Duke of Crawford, bay horse, foaled in 1871, bred by Powell Brothers, Springfield, Pa., sired Satellite 2500; by Robert Bonner 270; dam, Raxy, (dam of Golden Girl, 2:28½), by Sterling's Eclipse. He is standard under Rule 6, and registered in Vol. 5, his number being 3057. He is not in the 2:30 list, but one of his gets, Slickfast, has a record of 2.27.

How to Buy Trotters.

The great secret of success in the trotting horse business, is the art of buying right; and a wrong step at this stage of business, means a lack of success, till all sells out and starts over again. We often hear it said that "so and so" is a success because he is a good seller; but we will pin our chances to the good buyer. Most any one can sell trotting stock after that particular family, or branch, has become popular—but it is not every buyer that has the faculty of buying into families, or branches of families that will become popular or profitable. In many cases, the get of a certain sire may not be particularly popular this year, but will be so in a year or so to come, and the shrewd can detect many cases of this kind in time to reap a good reward. It makes a great deal of difference who owns a stallion, and also what kind of hands his get and near relatives are in, as to the probabilities of his future popularity. Extremely few stallions, comparatively speaking, are successful in forcing themselves into popular favor, without the assistance of favorable circumstances; and to buy the produce of a stallion that is being kept in obscurity by an individual and non-enterprising owner, is to invest in a gasping line without any well at the end of it.

A trotting sire to acquire and maintain popularity, must not only have individual breeding and merit, but must be owned and controlled by parties who will afford him assistance; have him properly handled, if in training; bring him into public notice by advertising; give him good mares in the stud, and see that his colts are developed and brought to the front when old enough to work. A shrewd buyer will not only look out for pedigree and individuality, but he will look into the probable future of the sire, or other near relatives, as indicated by ownership and surroundings. If a young sire, though with nothing in the 2:30 list, if bred right, is right himself, has youngsters that show speed and quality, and is in the hands of parties that will bring both sire and his colts to the front, his produce will do to buy.

It is the product and performance that make a sire or family popular, and these achievements are largely due to opportunity; as

"Many a flower serene
Blooms and fades unseen."

so many a real trotter is born that never trots, for want of opportunities.

In buying trotting stock, young breeders with small means especially, and who are not able to buy those that have already become noted too much attention cannot be paid to the probabilities. Never buy, for breeding purposes, the produce of a stallion that is handicapped by his owner, or surroundings, however well bred he may be, and expect the investment to prove lucrative; for nine cases out of ten you will be disappointed. Better buy the produce of a stallion that has a probable future as shown by his surroundings and prospects, though his breeding may not be quite so fashionable—Western Sportsman.

Corn for Horses.

Corn, says Prof. E. W. Stewart, in the Country Gentleman, is too heating, too liable muscle-sustaining and too dry a food for a trotting horse. It would be allowable to give a small proportion of corn in the ration of a roadster, and to give it in the best form whole, proportion the ration as follows: Three lbs. shelled corn, five lbs. whole oats and four lbs. wheat bran. Let these materials be well mixed together and given dry in two or three feeds per day, with about 12 lbs. uncut hay. If the horse is a good masticator, he would get a greater proportion of nutriment fed in this way than in any other from whole grain. The bran and oats mixed with the corn would cause a more perfect mastication of the corn, but the ration would be still better if the oats and corn were ground, and these proportions of corn meal, oat meal and bran mixed together, and then mixed with one bushel of cut hay and fed dry. The horse would eat a sufficient amount of cut hay with the ground feed to give bulk in the stomach, and thus cause more perfect digestion.

Very little, if any, corn or corn meal should be given growing colts. We might give food in the following proportion to growing colts: Three lbs. whole or ground oats, three lbs. wheat bran, half a pound cottonseed meal. Let this be well mixed together, seeing especially that the cotton seed meal is evenly distributed. Feed this dry, in quantity to suit the age of the colt with uncut hay. When the colt is a year or more old, one pound of corn meal could be added to this mixture. This is not given as a ration per head, but as a combination of food, the amount of which must be determined by the judgment of the feeder, since no age or weight is stated for the colts. The first combination given—oats, bran and cottonseed meal—is well calculated to develop the muscle and grow the bone of the colt. Bran especially furnishes the phosphorus acid to grow the best bone, and

oats are considered the standard horse food. This will grow the muscles and give a lively vitality to the young colt. We have here given the best form of feeding colts without cutting and moistening the hay and mixing ground feed with it, and in this case no grinding is required. We have known finely developed colts to be grown on this plan, and probably this will suit the case best.

Blood Tests in a Horse.

Recently a writer mentioned this instance of the intelligence of a Clyde horse: A few days ago a house was wanted to pull brick, by means of a pulley, to the top of an elevated reservoir. One of the Clydesdales happened to be at the table. "The man that usually handles him was away with the other. The question was asked if it would be safe to set Jack at that work. A wrong move might endanger the lives of the workmen on the scaffold. I told them that Jack would be perfectly safe if a good man would stand by him till he comprehended what was wanted of him. As his surroundings were strange, and his daily companion was absent, he seemed at first a little fidgety; but I carefully explained to him (you need not smile at this) what he was to do; and he stopped promptly when the man called from the top of the tower to hold on, and in fifteen minutes more, to the merriment of the boys, Jack, after hearing the call, "Hold on!" turned around with his whiffle trees and marched back to the point of starting, without help from any one. The master now called from the top of the tower, saying that we should put a little bit of white board on the grates, right where Jack was to stop, and that the horse would walk right up to that and stop every time. This he did all the rest of the day, without making a single mistake or blunder. It was evident that he kept watch of the movements, for he looked up to the tower occasionally, as if he were taking in the whole proceedings. I would rather have a smart horse for my helper than a dull man. The horse generally has his mind on his work and knows what is going on, while the man sometimes does not.

Horse Gossip.

JACK the fastest son of Pilot Medium and Carrie Russell, and owned by George Middleton, of Chicago, has been sold to J. M. Forbes, of Boston, Mass.

JOHN SPAN announces that the statement made by Mr. C. H. Nelson that he had promised to drive his horse in the Boston stallion race is wholly untrue. Mr. Nelson seems to be with naughtness and dispatch on every possible occasion.

AT Col. S. D. Bruce's recent sale of thoroughbred horses at Lexington, Ky., 80 head brought \$1,425—an average of \$17.75. They were by such sires as Bonnie Scotland, Australian, Prince Charlie, War Dance, Saxon, Glenney, Pownall, &c.

W. C. FRANCE & SON, of Lexington, Ky., have sold to T. B. Ketchell, of Coldwater, this, a bay colt foaled 1889, by Red Wilkes, dam Mambrino Jane, by Mambrino Patchen, dam kitty, by Black Warrior, out of Nell, by Bay State Morgan.

THE Christmas number of the Chicago Horseman is a very fine one both in its matter and typography. A number of the breeding stables of this State are well advertised, and it is altogether an interesting number for Michigan breeders.

MURKIN, a filly that recently made a 2:30 record, and is sired by the great Stamboul, will be bred at Anteville, 2:19½, owned at the Clarendon Farm, this city. Anteville is by Ectioneer. That ought to be a fine combination from which to get fast and game trotters.

THE Ingleside Stock Farm, through its manager, W. F. Adams, sold a span of Fred. B. H. mares for \$600—two four-year-old and the other seven. Blood will tell, and here again is an instance of good breeding bringing its reward.—Grand Lodge Independent.

Last Friday Dr. Galbraith had the misfortune to lose a valuable Mambrino Patchen mare, for which he paid \$1,000. The mare was running out at his farm, when from some cause she fell, breaking her leg. The injury was a very bad compound fracture, and the animal had to be shot.—Pontiac Gazette.

THE Twin City Jockey Club, of St. Paul and Minneapolis, announces stakes to close Jan. 18, to be run at their summer meeting, beginning Wednesday, July 22, and ending Saturday, Aug. 8, 1891, for which a programme will be arranged for 16 days racing, with more than \$5,000 in added money to stake and purses.

J. C. LINEMAN, of the Lima Stock Farm, Lima, Ohio, has just sold to H. L. and F. D. Storer, of Dubuque, Ia., the bay colt Elwood, two years old, by Nutwood, dam Georgiana, 2:26½, by George Wilkes, for \$10,000, and the yearling colt Albert Lee, by Alcanta, dam Meg Merilee, by Ectioneer, for \$6,000. The Mesars Storer are the owners of Nutwood.

Some interesting observations upon the transmission of color in horses have recently been published by Prof. Vlakken, of Vienna, Austria, English thoroughbreds, both sires and dams being the same color, transmit their color to the offspring in 588 cases out of 1,000. When the parents are different in color of the mare generally results. Bay is the more frequent color, black the rarest, and there are only about 190 black mares per 1,000. Two of the same colored Arab horses will give their hue to their offspring in 96 instances out of 1,000. The Arab is usually white, and 239 times out of 1,000 of the mare is white and the stallion is not, the foal will be.

The Coldwater Republican reports the following sales of horses by parties in that vicinity: Mr. A. H. Robbins, of Alerton, N. Y., bought from James Walker the black filly Romp, foaled 1887, sired by Royal Farnsworth, dam Wining Ways; actual price, \$350. The same party bought from L. M. Wing for about the same figure, the bay filly Camilla, by Hambletonian Wilkes, dam by Byerly's Abdallah. Mr. W. E. Ford, of Crosswicks, N. J., bought of Scott McLane a yearling chestnut colt by Royal Farnsworth, dam Beauval, by Masterstroke; actual price, \$350. Also from Smith Clibbe a bay filly, two years old, by Hambletonian Wilkes, dam by Masterstroke; price not stated. These four have been shipped to New Jersey. Verify the Farnsworth and Hambletonian Wilkeses sell well.

SENATOR LELAND STANFORD, the owner of Palo Alto Stock Farm, says he has not yet decided what horse to select to take the place of

Electroner, his famous stallion. He said: "I have several good stallions of the same blood, such as H. Electricity, Palo Alto, and Asmoo. I shall give Palo Alto a good opportunity in the stud. Electricity would, I think, have trotted very low down, but he suffered an injury to his leg and I had to throw him out of training. The same difficulty now presents itself as when I purchased Electroner, in that I must replenish my stock with mares of different blood lines. I shall stick to my theory of breeding to thoroughbred mares, believing thereby that the best results can be produced. I must breed on and on. No backward step must be taken, but whether in my lifetime I shall breed a horse that can trot a mile in two minutes is a problem that I am not capable of solving. I shall earnestly endeavor to do so, and in so trying I shall certainly not retrograde in the science of breeding."—Rural Home.

Liability of Dealers in Seeds.

A correspondent of Grange Homes writes that paper from Lawrence, Mass., concerning a case of interest to those who must depend upon seedsmen for their supplies:

A case has just been decided in the superior court of Essex county on this point. The plaintiff, a farmer in Methuen, bought in 1887 a peck of corn for Crosby Early Sweet. The same was planted about May 20th on an acre of peat meadow which was well drained, well gravelled and sheltered on north and east, and was an excellent piece of land for corn. It was also heavily manured; the corn came up quickly and very evenly, grew rapidly and had a healthy color. At the second hoeing it showed signs of spindling and soon the whole field was fully developed, the stalks only 18 inches to three feet in height, and the ears were small and close to the ground. The plaintiff took some of them to market twice and could not sell them on account of their small size. The crop, stalks and ears, was used for fodder and appraised at \$5 to \$10. It was further shown to the court Crosby's Early is rich land grows six to seven feet in height and has ears six to eight inches long with 12 to 16 rows of corn. Stalks and ears of these dimensions grow this year on this lot of land were exhibited in court and the value of an acre marketed with the fodder was put at \$80 to \$100. The defendant showed their arrangements for keeping seeds on sale. The corn was in half barrels, labelled on the sides in large letters and cards distinctly marked were inside; mistake was almost impossible. They further showed by expert evidence that with an excess of moisture corn would spindle early and be of dwarfish growth. The trial was without a jury before Judge Dewey, who awarded the plaintiff \$90 damages and costs.

Seedsmen do have excellent precautions for preventing mistakes, but mistakes or tricks do occur. They frequently pay too largely for some kinds, or a certain kind suddenly becomes unpopular and is not called for; then they put upon those not well posted on seeds, or any one not likely to say much about it. A few verdicts like this every year will teach them it is short-sighted policy to give customers what they do not want and do not call for.

Profit in the Dairy.

At the meeting of the Massachusetts State Board of Agriculture, which seems a profitable agricultural symposium, G. W. Hoard, of Wisconsin, said that when the Home creamery was started in Fort Atkinson, he kept a list of the receipts per cow of each of the patrons sending their milk to the factory. At the head of the list was a dairy of 35 cows in addition to the skim-milk taken home for feeding to calves and pigs. At the foot of the list was a herd that produced but \$35 per cow. The cost of keeping these cows could not have been less than \$30. To keep the best herd cost \$40, but the profit was more than four times greater. Of the patrons had increased the yearly milk of butter from 150 pounds per cow to 350 pounds, through breeding, feeding and handling.

Governor Hoard thinks it is as foolish for dairymen to pool their milk in a common factory as for mechanics and other workers to pool their labor when one is worth twice as much as another. At the Fort Atkinson creamery there is a vat called the Jersey vat, into which every patron can pool his milk provided his herd is half Jersey or Guernsey and the milk contains a certain percent of solids and butter fat. They are poor, weak, old and unable to lay eggs. Too many think a hen is a hen, and one is as good as another. We do not think so with cows or anything else. A dry barn basement is a good place for hens; an open shed or where we store the tools is not. The quarters must be dry, warm and light. Too much light is not good—that is, too many windows, as a window will conduct cold as well as heat. A poultry house with too many windows will be too warm in the sunlight and too cold in the night. The walls of the henry should be lined with tarred paper both sides. The roosts should be low, and the nests so they can be cleaned easily. If your hens get lousy, clean out the henry, turn out the hens and burn sulphur in it, closing all the doors. Burn it so long and well that every crack is filled with the fumes. Dust the Persian insect powder into the feathers of every fowl. A dust bath is essential. This can be a box filled with rood dust and coal ashes. Wood ashes are not good, as with any dampness they will adhere to the birds and injure them. If we want eggs we must feed for eggs; if flesh, then for flesh. Eggs require nitrogenous foods. To fatten our fowls we use more of the farinaceous foods—corn, buckwheat, &c. Sixty-three farmers replied to a circular. They average 71 hens each, and their average egg production is 97 cents. Some who kept only fancy strains made a most fabulous returns. One man had only 12 fowls, and he reported \$72 as his net returns. I know he sold one bird for \$10, but such sales are very unusual.

We must pay careful heed to little things. A hen has her nature, and it is as strong with her as the nature of an ox. Her instincts must be respected. We are too much like the Hindoo who piously cross themselves and pray that they be delivered from the heresy of wishing to know more than their fathers. We had better see what diamonds we can find on our own farms than to be looking to the great West.

Clover and Corn.

Good clover comes first in the order of inexpensive rations, in the pasture, the afternoon, or in the stable. It should be cured when there is the most honey in it. Clover does not impoverish the soil. The more we grow of it the more our soil will grow of other crops. The short crop of hay with us three years ago, when we had to feed grain to our cows to get them through, proved to the farmers of this section that feeding grain to cows is an advantage, as our cows never did better.

Next to clover comes corn. The sowed fodder corn is poor enough, not better than sticks soaked in water. Hundreds of acres of such trash are grown and called food. Corn should be put in drills and the kernels one foot apart—to get the most yield of real food. Green ry is good in the early spring, also oats and green corn in their turn. The old pastures must be plowed up and resown; many of them are run out, and it takes too much territory to pasture our cows. We can run a sheep fence around a part of them and put on some other crop to renew them, and then reseed them.—Hon. N. Clark.

The Physiology of Breeding.

The following cardinal points were considered by the late James Howard, to be fully established in breeding all races of live stock and are offered for the benefit and consideration of breeders of cattle for the dairy. The experience of others in this line, very generally substantiates Mr. Howard's conclusions:

1. That from the male parent is mainly derived the external structure, configuration and outward characteristics, also the locomotive system of development.

2. From the female parent is derived the internal structure, the vital organs and in a much greater proportion than from the male the constitution, temper and habit, in which endurance, constitutional vigor, and powers of digestion and assimilating are included.

3. That the purity of the parent, the more certainty there is in its transmitting its qualities to the offspring; say two animals are mated, if one is of poor descent than the other he or she will exercise the more influence in stamping the character of the

progeny particularly if the greater purity is on the side of the male.

4. That apart from certain disturbing influences or causes, the male, if of pure race and descended from a stock of uniform color, stamps the color of the offspring.

5. That the influence of the male is not infrequently protracted beyond the birth of the offspring of which he is parent, and his mark is left on subsequent progeny.

6. That the transmission of diseases of the vital organs is more certain if on the side of the dam; and the joints fit on the side of the male parent.

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Poultry and Its Value.

At the Farmers' Institute held at Lowell, N. Y., F. W. Dunley considered the above topic. He said:

The importance of any branch of farming or of any other industry must be judged by the profit in it. Our poultry occupies or may occupy a front rank in this respect. It amounts to more in dollars and cents than the value of the corn crop, and it equals that of dressed beef. In the year 1885 there were imported into the United States 10,095,450 dozens of eggs at a cost of \$2,500,000, or about 15 cents a dozen. It has been proved that a dozen eggs can be produced for 10 cents, and less than this sum is paid to the producers of those which are imported. This five cents, as between the foreign producer and the consumer in this country, is equal to about \$80,000. The new tariff has a duty of five cents on a dozen for imported eggs. This really gives the American farmer an advantage of ten cents a dozen over the foreigner. The foreigner gets only ten cents a dozen, and the consumer here must pay the duty, thus forcing the producer abroad to take a very low price for his eggs to compete with us. It took concerted action to secure this legislation, but the poultry men are thoroughly organized and worked together.

Poultry should be divided into three classes:

For fancy purposes, market and farm.

We must decide whether we are going to try to produce poultry or eggs. Some men are not fitted for the care and details required for growing the poultry. Such persons should not try. If the purpose should be eggs the smaller breeds are best, but for broilers the larger—the Plymouth Rocks and Wyandottes. For roasters, Brahmans, Lancashires and Cochins. Two many are kept with any purpose, method or profit. They are poor, weak, old and unable to lay eggs. Too many think a hen is a hen, and one is as good as another. We do not think so with cows or anything else.

Clovers do have excellent precautions for preventing mistakes, but mistakes or tricks do occur. They frequently pay too

Horticultural.**HORTICULTURE AT THE WORLD'S FAIR.**

To the Editor of the Michigan Farmer.

I think the MICHIGAN FARMER should have a say in the coming World's Fair in Chicago. No doubt the agricultural department will be well taken care of. Pomology will be in good hands at any rate as far as Michigan is concerned, with Prof. T. T. Lyon at its head, with plenty of good men to assist, not forgetting the grape growers and wine makers, who should make quite an important showing, and most likely will be well cared for.

I would like to know if any sort of provision is being made to induce those interested in Horticulture and Floriculture combined, to make one of the most attractive features of the great show? Or are they to be left out in the cold, or at best to play second fiddle to something else? If so, I think the sooner they know where they stand the better.

The Horticultural and Floricultural department was a great feature of the Centennial at Philadelphia, and I think it would be safe to say that there was one dollar invested at that time, there is one hundred now. Provision should be made and inducements offered to make such a display as was never seen at one time and one place before.

It should consist of all kinds of tropical plants, such as are grown for ornamental work, and are adapted for green house, hot house and conservatory, both flowering and ornamental foliage, including orchids, palms, ferns and an endless variety of other plants, from outside flower beds, carpet bedding, ribbon bedding, in fact all kinds of ornamental bedding for which Chicago parks are noted.

The florists could make a grand display in cut flowers and designs of every description in flowers, and also introduce new designs and new features, which are required for every day, either something new in flowers or in the arrangement of flowers.

Then what is generally known in the trade as the florist supply man should come in with every thing a florist uses in his business, from a tooth pick to a railway engine frame to be covered with flowers, and in tools, implements, and everything from a garden trowel to a wagon built for the especial delivery of flowers, and from a can stick to a rustic arbor; from hair wire to a wire arch; from specimens of gravel for walk making to all kinds of fertilizers; from a common inch peg to an ornamental vase six feet across, besides many other things too numerous to mention in this article. If the florists are there the supply men will be on hand also.

Later on I would like a chance to say a word concerning the management of the premium list, the arrangements of plans, etc., as these points are sometimes not understood by the farmers or machinery men, or even the city aldermen. S. TAPLIN.

Fort Street West, Detroit.

LENAWEE COUNTY HORTICULTURAL SOCIETY.

In the Adrian Times we find a report of discussions on several subjects at the annual meeting of this Society. One was, "How to protect the fruit buds on peach trees during cold weather in this climate?" It was answered by Dr. Woodward, an extensive fruit grower. He stated the first point would be locality. Secure a plot of land reasonably upon the highest point accessible; do not cultivate the land too late in the fall; the trees would start a new growth which would consequently be tender; would not culivate any after the first of August, and the majority of buds would be safe with the mercury seventeen degrees below zero; would head back young trees two or three years; after setting would like to have the branches as near the ground as possible; cultivate as near the tree as you can conveniently get with a horse; do not hoe or cultivate at base of tree; cultivate shallow; use the ground raw bone-meal and wood ashes around trees, with a liberal supply of stalk manure between the rows, direct from the stable. He did not find any difference between grafted or budded trees, as regards hardiness, and no difference in soil as regards quality of fruit. Mr. W. is a practical fruit grower, and any one contemplating selling out peach trees will do well to bear these points in mind.

Question: "Will Paris green affect the quality of the potato?" Ans. Yes, if applied in sufficient quantity to injure the foliage.

The question, "How are we to get rid of the ground moles?" is one of much importance, and after hearing all said upon the subject, your reporter is still at a loss to know how to get rid of them, having tried several kinds of traps with little success, and it seems to be the mind of some that they do more good than harm, we will let them go on their way rejoicing.

The Mistletoe.

The legend of the mistletoe is an inheritance from the religion of the Druids. The cathedral arches under which the Celts worshipped were the spreading branches of the oak, the root a dense foliage of greenery, and the mistletoe, the mystical parasite of the tree, was a symbol full of meaning, for it was believed to renew its life by some agency differing from that which propagated all other plants and to exist by a divine power. Here at the oak, the favorite tree of the Celts, sun god, at the period of the winter solstice, priests and people sacrificed white bulls and human victims. The mistletoe was gathered and dispensed in small sprigs, to be hung by the worshippers over their doors as amulets against evil and propitiation to the sylvan deities. The Scandinavian legend of the mistletoe, which tells the story how Loki, the god of fire, made the mistletoe the agent of the death of Balder, most glorious of Odin's children, is familiar to all students of the Norse Sagas. The mistletoe continues to be specially cultivated in England for the sale, which is always large at Christmas tide, but the apple tree has taken the place of the oak, as the notion on which the plant tests the most generally. The kissing privilege connected with the mistletoto during the days of yore is probably the most familiar relic of its tradition. Both the yule fire and the mistletoe

were old believed to have special virtue as safeguards against the powers of evil; yet when they became thoroughly embodied in the Christian legend, it was not so much this as their suggestion of the divine power which at Christmas kept the Prince of Darkness and his satellites in strict subjection that gave them their value. All readers of Shakespeare will remember the legend and its association with the crowing of the cock, as put in the mouth of Macduff in "Hamlet."

It faded on the crowing of the cock.
Some say that ever 'gainst that season comes
Wherin our Saviour is born is celebrated.
The bird of dawning singeth all night long;
And then, say they, no spirit can walk abroad;
The nights are wholesome; then no planets strike;
No fairies take, nor which hath power to charm;
So hollow'd and so gracious is the time.

Harper's Weekly.

A Good Hot-Bed.

The time for preparing a hot-bed depends upon what it is to be used for, but most market gardeners get theirs ready in November, and cover it over with litter and straw. The bed is then ready to use any time during the winter. The best plan is to begin to prepare for the hot-bed, and then time will be lost in having it ready for spring. The loan to be used ought to be selected in the fall before the ground is frozen up, and then the frame work may be built any time. But even when the hot-bed is only used for forcing vegetables in the spring, it is much easier and more profitable to construct it before the heavy frosts of winter. Building a hot-bed in the middle of winter is difficult work, for the ground is hard and frozen and unyielding. The ideal hot-bed is one that has a frame which can be bolted together quickly in the fall, and then taken apart in the summer time to be packed away.

Select a southern exposure if possible for the hot-bed, and then dig down about one foot in the soil. At each corner drive down a joist until it is solid, and nail to their outside two inch plank, allowing the top to come up even with the ground. On this solid foundation the frame work is to be placed, and that must be built of coarse, ponderous stuff. A good frame can be made of two-inch stuff spiced to corner joints, with the back side nearly or quite as high again as the front. This will give the proper inclination. A frame nice feet in length will require three ordinary sashes. The front and back of the frame should be made to fasten together by bolts or pins so that they may readily be taken apart. This frame can be made to fit tightly upon the foundation so that the hot-bed will be partly above and partly under the ground. A bed entirely above ground requires more watering and more heating material than one partly underground as just described.

The best heating material, of course, is fresh horse manure, shaken up well, and beaten down with a fork in the bed. It should be picked in the hot-bed so that the bed is made higher than the front, and the whole should be some six inches higher than when plants are placed in it. The manure will settle considerably, and at least six inches of it is needed in this condition for spring, and twice for winter. The quantity of loam to be added must be given by the nature of the plants. The more loam that is sprinkled over the manure the less will the heat be retained in the bed. An improved method is adopted by some progressive market gardeners, which consists of an alternate layer of tan-bark and manure, or a mixture of leaves with manure. This is to get a more steady and longer heat from the manure. After the manure is spread and packed in the bed, cover the sashes over it, and in a few days it will be necessary to partly remove them to give the steam a chance to escape. Shortly after this the loam may be added, and then the bed is ready for seed. The question of proper ventilation must be left with the individual, but it is sufficient to say that care and attention will be repaid. Success with a hot-bed depends as much on the management as upon the construction of the bed and frame work.—*Practical Farmer.*

Does the Pollen Affect the Fruit?

We think this question ought to be settled definitely and authoritatively. We have horticulturists with considerable knowledge of botany, who contend that in some cases the pollen affects the fruit the first year, while others contend quite as positively, that it never affects the fruit the first year, but the seed, only. That the seed, matured from the union of the pollen of the stamen with the ovule of the pistil planted the next season, will produce fruit a crop of the parents, while the pollen comes from a different variety from the ovule.

Were the former theory true, while we might often derive benefit from using the pollen of a better variety than that containing the ovule, we never could be certain of growing fruits true to name so long as there were other varieties growing and blossoming at the same time in the same neighborhood. There is little doubt that pollen may be borne some distance, on the wind, and may be carried still farther by bees and insects, and it does affect the fruit the first year, but the better varieties of fruit might be terribly mixed. Our Broughs, Gravensteins, Spys, Fauvenses, etc., might be badly crossed with some inferior apple, perhaps a seedling, the stamens of which might bear pollen of great vigor and potency. To be sure, we might plant the Crescent and Sharpless strawberries near the Wilson and Triomphe de Grand, thereby improving the texture and flavor, but we should have no assurance of picking Bartletts, Seckels, Sheldons, Jonathans from our orchards of these varieties.

With our numerous experimental stations all over our land we now ought to be able to settle it right. Mr. Jacob Moore, of Attica, N. Y., formerly of Rochester, who has acquired quite an extensive reputation as the originator of some good fruits, notably the Brighton grape, and who has been experimenting over thirty years in crossing varieties of different species, declares, emphatically, that it is impossible for the pollen to affect the fruit the first year. He has been experimenting for several years on corn. It has been a common tradition among farmers that it is unsafe to plant different varieties of corn in proximity as they would mix. We were always careful to plant pop corn and rare varieties of sweet corn at some distance from other varieties of corn for fear they

would mix. It is perfectly proper to isolate such varieties as you wish to save seed from as any mixture of pollen would show the second year, but for the current year's crop there is no necessity of separating different varieties.

Mr. Moore has repeated experiments so many times, with corn, never finding any mixture unless the seed was exposed to crossing the previous year, that it would seem as clear proof as it is possible to have of a negative. Now let numerous experiments be tried by experiment stations, with several species of fruit, including the cereals, the utmost care being exercised to isolate the species for one or two years and then crossing them with pollen of other varieties and see if any mixture of varieties ever occurs the first year.—*Rural Home.*

Malaga Grapes.

Those large, white, delicious grapes, so frequently seen now-a-days, displayed for sale in grocery stores and placed on restaurant and hotel tables, are said by some physicians to be an excellent remedy for sufferers from the grippe. The consumption of this grape in this country, says an eastern exchange, has increased 100 percent in the last 10 years, but supplies are limited. From a small province of Malaga are the grapes shipped. They are of such a tender nature that they can be shipped only in September, when the fruit is ripe, and a few thousand barrels limit American shipments. Spain, however, sends to this country large quantities of grapes which are called Malaga.

The Spanish fruit is white in color, and has astonishing tenacity of life. The grapes begin to ripen about the middle of August, and are usually harvested by October 1. The bunches, when plucked from the vines, are piled in ventilated places to a depth of two or three feet and allowed to "sweat" for a couple of days. This is to toughen the skins. They are then packed in barrels between layers of cork dust, and will keep in that condition for a long time—indeed almost a year. Last year about 140,000 barrels or about 3,000,000 pounds of grapes, came to America, and price for them ranged very high. At least 300,000 barrels are expected to arrive in New York this year, and the demand, at high prices, will also be active.

The Mistletoe Bough.

Of this plant, so mysterious to the ancients and so associated with the observance of an old fashioned Christmas, a correspondent of the *N. Y. Times* says:

Failures to transplant the mistletoe have been attributed to the fact that the seeds had to be passed through the stomachs of the titlards that feed on them in order to undergo some chemical change preparatory to germination. The seeds of the plant are deposited by birds on the bark of the trunks and branches of trees, and the rootlets which send out innumerable roots through the crevices of the bark and thus become incorporated with the wood. Tarsus are among the principal birds that help to disseminate the seeds, and they may be seen gathering the seeds almost any day. The viscous nature of the seeds causes them to adhere to the beaks of birds, and in order to get rid of them they occasionally rub their beaks against a tree, thereby leaving some of the seeds fixed to the bark, where they stick fast and vegetate. They also when ripe drop from the plant, and in their descent sometimes come in contact with other branches, and the viscous matter causes them to adhere in like manner till they germinate. New forests of black jack will thus often be planted with the mistletoe in this way, and after the plants have once got a good start they spread rapidly.

The young mistletoe plant seems readily to imbibe the ascending sap from the wood of the tree upon which it grows, and this it converts into a proper juice adapted to nourish its own structure by the aid of its leaves. It is sometimes grafted here on trees for ornamental purposes, and it has been made to grow upon the apple, pear, poplar and willow. After the seed of the parasite is fixed to the bark, germination takes place in about two months. The first appearance of the plant is two horn-like processes (resembling the horns of the common snail) rising from opposite sides of the seed. They first shoot out straight, and afterward bend back till their extremities touch the bark in opposite directions. They remain on this position for the first year, but like a bow, with one end fastened to the seed and the other to the bark.

The second year the seeds rise from the bark, when the leaves belonging to each radicle separate, and each becomes a separate plant, whether there be two or three, as sometimes occurs. The plants are firmly established at this time, but they do not make much growth until the third year. Then they grow rapidly and begin covering the black jacks with their green boughs. No prettier sight can be imagined than a forest of black jack covered with the bright mistletoe, hanging in great festoons and boughs over the head, while the trees themselves are perfectly leafless. The birds of the North, enjoying their brief Southern trip, flock to the trees in numbers, where they pluck the berries in great earnestness. Like Florida orange blossoms, many of these mistletoe boughs are shipped to the cities about the holidays to brighten the inside of the homes, and not a few of them sell for handsome prices. A small spray of mistletoe in the North is worth half a dollar, but down here bushels of it may be had for the plucking.

Fungus Disease of Spinach.

A correspondent of *Popular Gardening* says few vegetables are exempt from the attacks of mildew and other fungoid diseases, and the surest preventive for this and all others is a strict system of rotation. Plant on new and uninhabited ground, and as far as possible away from last year's spinach patch. Perhaps a light dressing finely pulverized sulphate of iron (green copperas) at the rate of fifty pounds per acre, applied at or before the time the seed is grown, may serve to destroy the spores on infected soil. But this is more or less conjecture. Give abundance of available plant food. Dressings of nitrate of soda will be found useful. Under glass the treatment recommended by Prof. Maynard for lettuce mildew will most likely prove effective. Grow at low temperature (55 to 40 degrees at night, 50 to 70 degrees

in daytime); give plenty of plant food and an abundance of water, but apply it in the morning and bright days only; avoid sudden extreme changes of temperature. After the disease has once taken hold of the plants, it is not so easily dislodged; but the fumes of sulphur kept boiling on a little stove in the closed greenhouse or pit for several hours at a time may accomplish a cure if repeated as needed.

FLORICULTURAL.

To produce the immense blossoms which win the premiums at chrysanthemum shows, cuttings are started in February. From that time onward, there is no let-up in their growth, and they are pushed for all they are worth, at first by continuous re-potting of one size after another until the buds begin to show for flower. They are then regularly fed with liquid manure, and only one flower left upon each individual shoot. Careful training of the branches is also attended to, so that each shoot has so much room, and each flower just enough room to expand boldly and leave a fringe of foliage between each individual flower. To be a perfect success the foliage or leaves must not die down, but remain green until the last.

FLORICULTURAL.

The much talked-of-chrysanthemum, Mrs. Alpheus H. Rice, says the *Pairie Farmer*, is a strange flower when seen at its best, with its pure white globe of refined petals, the underside of the petals being thickly clothed with minute hairs, velvety pile, giving the name of the "ostrich plume." It is thought by many hard to grow. At Robert Craig's we saw a house 200 feet long filled with a mass of flowers from end to end, containing an enormous number of flowers, and we saw \$15 per 100 paid for the best flowers. This pays. We were told that it should always be under glass, and not exposed in summer. They were planted out on the benches like roses and struck in June.

A MINGLING OF CHRYSANTHEMUMS AND AUTUMN FOLIAGE.

CONSIDERABLE comment was caused by three "weeping trees" near Russellville, Ky., this fall, and much speculation indulged in as to the cause of the peculiar shower, which fell in a heavy mist from the trees for over a week. Investigation proved it was caused by the aphides which produce what is known as "honey dew," and which literally covered every portion of the tree. The deposit of "honey dew" is the largest ever known.

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men, he's not the author of the production for which he has been so highly praised, but that he hired it written and took the credit of its authorship. Commissioner Smith, manager of the business and of the operations, has resigned his position because of some things connected with the management of the funds, too much being controlled by Booth.

Capt. Norville, special agent of the department, has returned from Fort Bennett and reports the Indian war over. The commanding officer at Fort Sully has received the resignation of 175 Uncertain Indians, 412 of this Foot's force. The Indians were obliged to surrender their arms, and from Big Foot's followers 93 stands of arms were collected. They were very reluctant to surrender them, but General Palmer gave them the alternative of "No arms; no rations, no blankets."

Foreign.

Four British gunboats are distributing meat, potatoes and other stores for the relief of the garrisoned inhabitants of certain sections of Ireland.

There is a general strike on Scotland's railways, causing trade throughout Scotland, especially in the vicinity of Glasgow. Nine thousand men are out.

The Spanish government has appointed a commission to look into the matter of reforming the commercial treaties now existing between Spain and other countries, with the object of applying a policy of protection to the country and possibly to the colonies.

The Parnell party made an overwhelming victory in the election of the Kilkenny parliamentary district held on the 23rd. Scully, the Parnell candidate, was defeated by an overwhelming majority. The most peculiar thing about the election was the fact there were no fights, though the excitement was at fever pitch.

Agents of Baron Hirsch, the wealthy Jewish philanthropist of Paris, are visiting Brazil and the Argentine Republic for the purpose of prospecting a location for a colony of Russian Jews now about to leave Russia. The benevolent Baron will aid to establish them in South America if a good location can be found.

Wabash Holiday Rates.
On Dec. 24, 25, 31, and January 1st, the Wabash R. R. will sell excursion tickets to all points East of the Mississippi River, including Chicago, Ill., and St. Louis, Mo., at one and one-third fare for the round trip. Tickets will be good on all trains and valid return up to and including January 31, 1891. City Ticket Office, 9 Fort St. West, Hammond Building. Depot foot 12th St.

NEW ADVERTISEMENTS.

WANTED.—A good, steady, middle aged man for small family to care for dairy farm. Address "Farmer" this office.

FOR SALE.

On terms to salt purchaser, the Percheron stallion.
LAMBA 3653 (117)
seven years old, sound and right. Weight, 1,500 pounds; color, very dark grey. Has averaged 90 percent of mares in foal, for three seasons. His colts are fine, large draft horses. Will take a permanent or young stock or exchange for unincumbered real estate.

C. E. ROBINSON,
Lawrence, Mich.

W. H. FISK,
BREEDER OF
Shorthorn Cattle and Merino Sheep,
Gaskill, Mich.

I have for sale a Shire filly, examine two years old, a white shire colt, examine one year old, both from imported sire and dam. Also an imported Shire stallion, five years old, gistered with the English and American Shire Horse Books. Terms reasonable.

MERINOS.

Twenty-five Breeding Ewes for Sale, At very reasonable prices, if taken soon. Michigan Register.

A. J. C. JERSEYS.
A few Heifers for Sale.
W. J. G. DEAN,
Hanover, Mich.

STALLIONS!

100 Imported Registered Clyde, Shire, and Trotting Stallions for Sale, &c.

Because we take fancy Trotting Horses to Europe and bring back Percherons, Norman, Clyde and Shire Stallions, we can supply you in every way. It enables us to sell imported stock at a third less than any other importer. Terms fully warranted.

Terms given for catalogues.

ADDRESS
DR. VALERIUS & CO.,
WATERTOWN, WIS.

OAKLAWN FARM.

380 PERCHERONS
Largely Brilliant Blood.

106 FRENCH COACH HORSES,
Large, Stylish, Fast.

This aggregation, that for superiority in individuals, combined with the Choicest, Rarest, Breeding, was never before equalled in the history of Horse Importing and Breeding now comprises the STOCK ON HAND

at this Greatest Establishment of its kind on earth; among them the WINNERS of Thirteen First PRIZES AT UNIVERSAL EXPOSITION, PARIS, 1867, AND FORTY FIRST PRIZES AT the Great French Fairs.

PRICES BEYOND COMPETITION.

For information and Catalogue, address,

M. W. DUNHAM, WAYNE, ILLINOIS,
Twelve miles west of Chicago, on C. & N. R.R., between Turner Junction and Elgin.

RAISING HORSES.

The improved Clydesdale stallion, Darley 874 (Vol. IX, stud book), sired by Darley 222. He is a bay, with black points, and a white blaze. Has proved sure. Will be sold on request.

Registered Herford bull The Count, and cow Coquette (imp.), now in calf. For particulars address

FRANCIS GRAHAM,
88 Griswold St., Detroit.

Registered Clydesdale Stallion FOR SALE.

The improved Clydesdale stallion, Darley 874 (Vol. IX, stud book), sired by Darley 222. He is a bay, with black points, and a white blaze. Has proved sure. Will be sold on request.

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FRANCIS GRAHAM,
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**Bruised, Sprained, Cut
and USED UP
HORSES REPAIRED WITH
PHENOL SODIQUE
No Stable, Farm or Stock-owner
should be without a bottle.**

HANCE BROS. & WHITE, Proprietors, Philadelphia.

**Special Prices
ON —
SHROPSHIRE RAMS**

**FOR THE
Next 30 Days.
Both Home Bred and Imported Stock for Sale.**

Write for Prices at Once.
J. S. & W. G. CROSBY,
GREENVILLE, MICH.

**DOOR PRAIRIE LIVE STOCK ASSOCIATION,
IMPORTERS AND BREEDERS OF
Clydesdale, HORSES Cleveland Bay,
Percheron, English Shire,
Door Village, LaPorte Co., Ind.
Prices Low. Correspondence Solicited.**

**BLAIR BROTHERS,
AURORA, ILLINOIS.
IMPORTERS OF
CLEVELAND BAY, GERMAN COACH, ENGLISH
SHIRE AND CLYDESDALE HORSES.**

New Importation Just Received.
The animals now on hand are of exceedingly fine proportions, are of very choice breeding, are showy and stylish, and have the best of action. We have now the best lot of horses we ever owned. We offer First-class Animals at Very Low Prices. Every animal recorded and guaranteed. Visitors welcome. Catalogue on application. Stables in town.

ISLAND HOME

Stock Farm, H. C. Farnum, Importer and Breeder of Percheron and French Coach Horses, I offer a very large stud of horses to select from, guarantee my stock, make prices reasonable and sell on easy terms. Visitors always welcome. Large catalogue free. Address H. C. FARNUM, Grosse Ile, Wayne Co., Mich.

**Geo. E. Brown,
AURORA, ILLINOIS,
Pioneer Importer and Breeder of
Cleveland Bays and Shires.**

The oldest, largest and most complete collection in America. Established in 1874. Has been the CHAMPION STUD ever since. From 240 to 300 head on hand at all seasons. All young, vigorous, fully acclimated and of PRIZE RING quality.

150 Choice Bred Holstein-Friesians and 75 Berkshire Pigs.

SEND FOR ILLUSTRATED PAMPHLET.

**Springdale Farm, Lansing, Mich.
JAMES M. TURNER, Proprietor.**

Shorthorn and Hereford Cattle,
CLYDESDALE AND STANDARD BRED TROTTING HORSES,
Shetland Ponies and Shropshire Sheep.

SPECIAL SALE OF
300 SHROPSHIRE'S!
FOR THE NEXT 30 DAYS.

Imported and Home-bred. 150 RAMS READY FOR SERVICE.

HAVING more stock than we care to keep ready winter, we are prepared to make arrangements to sell our remaining Percheron Stallions or Mares or Jersey Cattle. We are prepared to sell our remaining stock which breeding will seem to be guaranteed. We believe in those who have a good record and justify our opinion. In breeding we have followed strict rules, and the results are gratifying well and can now show an accumulation of first class animals unequalled by any proportion of GOOD ones to total number. We have stallions for sale ranging from one to seven years old, but would prefer to sell them for two or three years. A portion of the larger number of the herds is a few years old in operation, though their breeding is as good as the best, and we guarantee a full guarantee of the health and soundness of each animal we wish to dispose of. We will make prices on these animals that we will secure safety. The good ones at reasonable figures, much lower than the same quality in other breeds elsewhere. The stock is good work horses, and so low that any one having a few dollars to spend and wishing to improve their stock, can afford to purchase. Terms will be given to suit. The owners ought to be given cash sales but we will extend any reasonable credit to responsible parties. Address LOG CABIN STOCK FARM, 1664 Woodward Avenue, Detroit, Mich.; City Office, 4 Morris Block.

RUSSIAN SPAVIN CURE

HORSE OWNERS! If you find your horse has RUSSIAN SPAVIN CURE, or any other disease, it is a sure remedy removes them and makes no care. Removes all enlargements from scrotum, instantly removes them and makes no care. Removes all enlargements from scrotum, instantly removes them and makes no care. RUSSIAN SPAVIN CURE, ST. PAUL, MINN.

**Black Meadow Farm,
ROYAL OAK, MICH.**

Standard-bred Trotters
BATES-BRED SHORTHORNS,
BERKSHIRE PIGS!

The high-bred trotting stallion

Teusha Grondie 5001.

will make the season of 1890 at Black Meadow for us, by the season, without return privileges. Teusha Grondie was sired by the famous Judith Ham of Hartford 22.2%, by Mambrino Chief II. Spartacus (dam of Ormond, 22.2%) by Mambrino Chief II.

Waterloo Duke 25th is at head of Shorthorn herd.

Sired by 17th Duke, Lethbridge, and Waterloo Duke 25th.

Francis Graham, 2618, State Telephone.

F. A. BAKER,
99 Bush Block, Detroit, Mich.

WANTED.—A young man with \$5,000 to \$5,000 to go west and manage a stock ranch. A good chance for the right man. Address Farm R. 1st this office.

FRANCIS GRAHAM,
88 Griswold St., Detroit.

FOR SALE.

Bruised, Sprained, Cut
and USED UP
HORSES REPAIRED WITH
PHENOL SODIQUE
No Stable, Farm or Stock-owner
should be without a bottle.

HANCE BROS. & WHITE, Proprietors, Philadelphia.

**SPRINGBROOK FARM,
DELHI MILLS, MICH.**

Being a little crowded for room, I will sell

Ten Head of Females

FROM MY

HERD of SHORTHORNS

At prices which will satisfy the buyer.

Come and look over the herd and select what you want.

MERINO EWES.

At prices which will satisfy the buyer.

Come and get your pick, or write for what you want. Springbrook is in shape to fill your orders, and do it satisfactorily.

W. E. BOYDEN.

At prices which will satisfy the buyer.

Come and look over the herd and select what you want.

C. F. MOORE,
ST. CLAIR, MICH.

Bates and Bates Topped

SHORTHORNS!

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At prices which will satisfy the buyer.

Come and look over the

THE MICHIGAN FARMER.

6

Dec. 27. 1890.

Poetry.

BRAVE LOVE.

He'd nothing but his violin;
It'd nothing but my song;
But we were wed when skies were blue
And summer days were long;
And when we rested by the hedge
The robins came and told
How they had dared to woo and win
When early spring was cold.
We sometimes supped on dewberries,
Or slept among the hay—
But oft the farmers' wives at eve
Came out to hear us play.
The rare old tunes—the dear old tunes!—
We could not starve for long;
While my men had his violin
And I my sweet love song.
The world has gone well with us,
Old man, since we were one!—
Our homes wandering down the lanes—
It long ago was done.
But those who wait for gold or gear—
For houses and for fine,
Till Youth's sweet spring grows brown and sere
And love and beauty die.
Will never know the joys of hearts
That met without a fear.
When had but your violin
And I a song, my dear.

THE DIFFERENCE.

At seven he stood before the glass and very
easily scanned
His young face, which now and then with
happy smiles would musc'h expand.
He passed his fingers o'er his lip and with a
wild and pleasurable shout
That scene the chandler exclaimed, "Aha!
the hair is coming out!"
At forty-five he stood before that self-same
mirror once again.
This time he wore the look that's donn'd by
worn and weary business men.
He passed his fingers o'er his head the while
his face was full of woe.
As with a long-drawn sigh he said, "Alas!
the hair is coming out!"

—Chicago Post.

Miscellaneous.

From Harper's Bazar.
**THE TRUE STORY, AND HOW
MAMMY HELPED TO WRITE IT.**

BY RUTH M. ENERY STUART.

It was nearly midnight of Christmas Eve on Oakland Plantation. In the library of the great house a dim lamp burned, and here in a big arm chair before a waning fire, Evelyn Bruce, a fair young girl, sat earnestly talking to a withered old black woman, who squatted on the rug at her feet.

"An' yer say de plantation done so!, baby, an' we boun' ter move?"

"Yes, mammy, the old place must go."

"An' is de 'O'erle Mr. Crittified buyed it, baby? I know he an' ole master set up all endurin' las' night a-takin' an' a-figurin'."

"Yes, Mr. Jacobs has closed the mortgag, mammy, and owns the place now."

"Who tol' yer, honey? Is old master see?"

"No, mammy. Father seemed so depressed that I followed Mr. Jacobs out this morning, and asked him all about it, and he told me,"

"He 'n't talk'd no way sassy ter yer boat it, he is, baby? Ain't put on no 'bawlish ways? Diz' leah permission merchams, dees puts on a heap o' bliggy an' superfluousness sometimes when de step inter de royal kingdoms, an' ray deyselves in robes mad for bigger folks."

"Mr. Jacobs spoke very kindly, mammy, I think he is truly sorry."

"An' when is we gwine, baby?"

"The sooner the better. I wish the going were over."

"An' what'bouts is we gwine, honey?"

"We'll go to the city, mammy—to New Orleans. Something tells me that father will never be able to attend to business again, and I am going to work to make money."

Mammy fell backward. "W-w-w-work! Y-yo-w-w-work! Wh-wh-wh, baby, what sort o' funny, cuwy ways is you a-talkin' in, anyhow?"

"Many refined women are earning their living in the city, mammy."

"I-sun' i-sun' sense, baby, er is yer dea-bluffin'? Is yer ed-uh so yo' li?"

"I don't think father is well, mammy. He says that whatever I say we will do, and I am sur it is best. We will take a cheap little house, father and I—"

"Y-yo-u an' yo' pa. An' wh-wh-what 'bout me, baby?" Mammy would stammer when she was excited.

"And you, mammy, of course."

"Um! um! um! An' so we gwine ter trubble. An' de 'O'erle Mr. Crittified done close de morgans on us. Ef'e! I'd o' known it dis mornin' when I was a-quizzifyin' me so serious, I b'lieve I'd o' upped an' assed 'im: 'Is he didn't o' helio, I low-e-ho was teckin' a mighty frien'-ly intrus, axin' me who de w-e-l's preck-on-trees bear big buckons, an'-an' ef'e we'll keep cool all summer, an' he's me—he's me—'"

"What else did you ask, mammy?"

"Seus me han'kin' it ter ya, baby, but he ex me who was buried in we graves—he did for a fac". Ter reck'n de gwine claim de graves in de morgans, baby?"

Mammy had crouched again at Evelyn's feet, and her eager brown eyes was now almost against her knee.

"Yes, all the land is mortgaged, mammy."

"D-n't yer rekk'n' he mought des nachel-ly seus de graves ou'n de morgans, baby, ef'e ax 'im I'm mannerly?"

"I'm afraid not, mammy, but after a while we may have them moved."

The old bronze clock on the mantel struck twelve.

"Des listen. De ole clock a-strikin' Chris-mas gif' now. Come 'long, go ter bed, honey. You needs a rest, but I ain't gwine sleep none, 'exz-all dishers news what you been a-teelin' me, hitte gwine ter run room? To my head all night same as a buzz saw?"

And so they passed out, mammy to her pallet in Evelyn's room while Evelyn stepped to her father's chamber.

Enterin' on tiptoe, she stood and looked upon his face. He slept as peacefully as a babe. The anxious look of care which he had worn for years had passed away, and the flickering fire revealed the ghost of a smile upon his placid face. In this it was that Evelyn read the truth. The crisis of effort

for him was past. He might follow but he would lead no more.

Since the beginning of the war Colonel Bruce's history had been the oft-told tale of loss and disaster, and at the opening of each year since, there had been a flaring up of hope and expenditure, then a long summer of wavering promise, followed by an inevitable winter of disappointment.

The old colonel was, both by inheritance and the habit of many successful years, a man of great affairs, and when the crash came he was too old to change. When he bought he bought heavily. He planted for large results. There was nothing pretty about him, not even his debts. And now the end had come.

As Evelyn stood gazing upon his handsome, placid face her eyes were blinded with tears. Falling upon her knees at his side, she engaged for a moment in silent prayer, consecrating herself in love to the life which lay before her, and as she rose she kissed his forehead gently, and passed to her own.

Mammy was almost crying. "An' what sort o' entry is we gwine meek inter decly, honey,—empty-handed, same as po' white trash? D-d-d-don' yer reck'n' we b-b-better teck de chickens, baby? Yo' ma thunk a hea' de' Brahma hen an' dem Clymth Rockers—dees looks so courageous."

It was hard for Evelyn to refuse. Mammy loved everything on the old place.

"Let us give up all these things now,

mammy; and after a while, when I grow rich and famous, I'll buy you all the chickens you want."

At last preparations were over. They were to start to-morrow. Mammy had just returned from a last tour through out-buildings and gardens, and was evidently disturbed.

"Honey," she began, throwing herself on the step at the feet, "what yer reck'n'? Ole Muffy is a-sett'n on fo'teen sugs, down in de cotton field. W-w-we can't g-way I'm heah an' le'ves Muffy a-sett'n, hit des natchelly can't be did. D-d-don'ter reck'n' des h'l' back de morgans a little, tell Muffy git done sett'n?"

It was the same old story. Mammy would never be ready to go.

"But our tickets are bought, mammy."

"An' is de 'O'erle Mr. Crittified?"

"I'll shoo ole Muffy ort de nea' an' split de whole sett'n! Tut tut tut!" And groaning in spirit, mammy walked off.

Evelyn had feared, for her father, the actual moment of leaving, and was much relieved when, with his now habitual tranquility, he smilingly assisted both her and mammy into the sleigh. Instead of entering himself, however, he hesitated.

"Isn't your mother comin', daughter?" he asked, looking backward. "Or—oh, I forgot," he added, quickly. "She has gone on before, hasn't she?"

On the table at Evelyn's side lay several piles of MS., and as these attracted her, she turned her chair, and fell to work sorting them into packages, which she laid carefully on the seat.

What did this mean? Was it possible that she had read but half the truth? Was her father's mind not only unfeebled but going?

Mammy had not heard the question, an' so Evelyn bore her anxiety alone, and during the day her anxious yes were often upon her father's face, but he only smiled and kept silent.

They had been travelling all day, when suddenly, above the rumbling of the train, a weak bird-like chirp was heard, faint but distinct; and presently it came again, a prolonged "p-e-p-e!"

Heads went up, inquiring faces peered up and down the couch, and fell again to paper book, when the cry came a third time, and again.

Mammy's face was a study. "Sh—sh! sh! sh! don't say nut'n', baby," she whispered, in Evelyn's ear; "but dishe chicken in my bo'ma is a-ticklin' me so I can't hardly set still."

Evelyn was absolutely speechless with surprise, as mammy continued by snatches her whispered explanation:

"Do'fo' we lef' I went'n' lit' up ole Muffy ter see how de aga' comin' on, an' dishe' ag' plapp'd out, an' de little risident look like he ey's me so berseechin'! I des macheely couldn't leave 'im. Look at me!"

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MODESTY.

One deeply solemn thought
Haunts me by night and day
Changing all joy to mortal,
Driving all pleasure away.
It's a thought of death
That thus I ponder on,
'Tis pity for the poor, poor world
When I am dead and gone.

For I sometimes must go
And leave the world behind—
Since I must bring such woes
Why was I ever born?
Dear human race, my grief
Is not for me, but you;
When I am dead and laid to rest
What will the poor world do?

Will this dark planet still
As now, go whizzing round
In its path, and ill
When I am in the ground?
And will the glorious sun
Continue to appear,
And will the stars come out each night
When I'm no longer here?

Then ask me not to smile!
What comfort can I find
Tormented all the while
By grief for all mankind?
Oh, I'm not fit to live
My existence you must see,
Without one spark of comfort, save
To know I grieve for you!

—George Horton, in Chicago Herald

A BALLOON EPISODE.

An Old Showman's story of a
Brave Acrobat.

One evening, in looking over the old showman's scrap-book, I read the following from a New York paper:

"Yesterday afternoon the balloon from Robinson's circus, carrying two performers, was caught in a storm over the sound and wrecked. One of the performers, Toma Patra, fell into the water and was drowned; while the other man hung to the cordage and was carried into Connecticut, where he was found uninjured, though the balloon was a total loss."

Closing the book, I turned to the old showman, and said: "As you evidently know something about this accident, tell it to me." He answered: "Yes, I do know something about that accident; for I was one of the occupants of the balloon, and don't think I shall forget the experience if I live for a thousand years."

"Toma Patra, or Tom, as we called him, was a strange man with a strange history. Though he was with the show for three years, he never told his real name or his history, except to me, and that but a moment before he died."

"We were performing in the West when he appeared and applied for position as an acrobat. Though asked for credentials and questioned as to his professional record, he refused to answer, and demanded an opportunity to exhibit his skill. He was given the opportunity, and proved to be one of the best acrobats that our manager had ever seen. In some respects, particularly in balancing objects, his skill was really marvelous. All that he did was truly artistic, without any resort to the trickery so common among such performers."

"Tom made friends very slowly, and made no confidants whatever. Though he treated all politely, he showed a reserve that was not pleasing, because it kept him from joining with the rest in their sports. Then it was soon noticed that Tom never spent any money, excepting for absolute necessities, and this fact soon gave him the name of Stingy Tom, though no one would have dared to use the name in his hearing.

"I never knew him to take the least interest in any one or anything, except once, when I had foolishly been under the influence of liquor, he said to me: 'My boy, stop it, for it can do you good, and may do you great harm.'

"I have always thanked him for those words, though at the time they did me no good, and I felt more kindly toward him after he spoke them. I believe that he did not feel toward me quite as he did toward the others."

"The manager decided to send up a balloon each afternoon, and while I had to perform on the flying trapeze under Tom staid in the basket to manage it; so far as a balloon can be managed. This balloon performance was a great card."

"We had been doing the balloon act about a month, when we reached New York City for a four weeks' stand—very glad of a rest after weeks of traveling."

"One Saturday night after the performance I found Tom reading a newspaper by the light of a torch, and I could see tears coming from his eyes, in spite of his apparent effort to keep them back. As I wished to spare his feelings, I pretended not to notice his agitation; and I then, by silently thanked me. He looked at me for a moment, and then said: 'Will you go to Philadelphia with me early in the morning, and come back again at night?'

"'What for?' I asked.

"'For company; and it is my request that you tell no one of our journey and ask me no questions.'

"It was with a sad voice that he spoke the words, and they again brought tears to his eyes. It seemed strange that a strong man should show so much agitation, and it affected me deeply as I took his hand and said: 'Whatever your trouble may be, you have my sympathy, and I will do as you request.'

"When we reached Philadelphia, he hired a horse and we took a long drive about the streets, with no apparent object. In accordance with my promise, I asked no questions, but I noticed that there was a particular point on Locust street which he passed frequently; and, though he drove from it apparently indifferent as to his direction, he always returned to the same place. In this way several hours passed, and finally, when we returned to the place which seemed to attract him, there were a barge and some carriages before one of the houses. After that he did not drive off at sight, but waited, sometimes at one point and then at another, but always with the house in view, until four pall-bearers came from the building carrying a small coffin and placed it in the hearse. Then, as the funeral train moved slowly along the street, he joined it and followed to last carriage to Laurel Hill. We left our buggy and stood among those nearest the open gate. I watched Tom's face, in which I could now a frightened struggle, the struggle not altogether successful of a strong man with his emotions. When 'Ashes to ashes and dust to dust' was said and the hollow sound of the falling earth was heard, the tears gushed from his eyes, and, turning from the others, he walked away. I did not follow, but left him to himself, and stood there after the others had gone, and waited. At length he returned, and, dropping a simple rosebush on the earth that covered the coffin, he said to me: 'Come.'

We hardly spoke during our journey to New York, and, though I was full of wonder, I made not the slightest reference to what had occurred.

"When Monday came a storm was threatening, and the manager asked if we dared make the balloon ascension. Tom answered that he would do as I said, and I said that I would go. We ascended in an uncertain and fitful wind, and the spectators applauded as the huge silken bag danced from earth with Tom in the basket, while I swung from the slender line twenty feet below him. I left the trapeze sooner than usual, and in climbing I noticed that the wind was coming much stronger from the west. As I stepped into the basket, a contrary current threw the balloon a sudden lurch that threw it on its side, almost pitching us out. Then the huge bubble righted, and shot toward the east with frightful speed, at the same time descending. As we looked below we saw water under us that was being lashed by the gale. We acted without speaking, for we saw that the balloon must have been torn, and that the gas was rapidly escaping. We threw over all of the ballast, and ascended again for a short distance, hoping to reach the north shore of the sound, but the hope was short, for again we began to descend. Then I loosened the trapeze and let it go, but it was too light to count for much, and we continued to approach the white-capped waves. 'The basket,' said Tom, as he opened his knife. Then we climbed into the basket, and all within it reached that was not necessary to support us. Again we ascended and sped toward the shore, but there was no hope of reaching it.

Mr. Chappellear's method is as follows: He has procured two single trees; which are attached one to each side of the car. A horse is hitched to one of these, and using the sides of the track as a tow-path they are urged on by the lusty voice and strong cowhide whip of the conductor to pull the freight he has collected. The horses objected a little to the work at first, but it is said that Mr. Chappellear has broken them to make the trip without much coaxing. On the line of road traversed there is a high trestle work about eighty feet long. This at first was a puzzler to the enterprising merchant, for his horses could not walk the cross-ties.

He overcome the difficulty, however, by unhooking the animals and leading them over on the ground beneath the trestle. After securing them he returned, and with a strong crowbar pried the car over the bridge. After the horses were rehitched and all went smoothly and gayly on their way.

It is said that Mr. Chappellear has taken the contract to haul forty-two hundred cases of canned goods from Hughesville to Brandywine. He can carry a load of several tons and can make the round trip in about eight hours.

STRIKES IN CHINA.

The Workmen Do Not Lose Very Much Time.

In China, as is well-known, things are topsy-turvy, and even workmen's strikes are different there from those in Western lands. Recently, says the London Times, a strike took place at the great arsenal at Klangnam, where about two thousand men are employed. It appears that the custom has always been eight hours' work per day since that establishment was founded, over twenty years ago. The new director, considering this amount too little for the wages paid, resolved to increase it to nine hours. The workmen steadily refused. The majority were against the innovation, and the minority, who were in considerable force, were completely intimidated. Hence, on the morning when the new regulation was to commence, the steam was raised in the boilers, the whistle sounded, and the machinery was set in motion as usual, but not a workman dared to pass inside the gates of work. It looked at first as if this life nothing worth having can be had for the asking; one must pay for whatever he gets, and pay in sterling coin. The moral order of the world rests on the same measure between work and reward. In the degree that a man's success is really great and worthy, he must work to secure it; and behind the success which has secured those honors. In this life nothing worth having can be had for the asking; one must pay for whatever he gets, and pay in sterling coin. The moral order of the world rests on the same measure between work and reward. In the degree that a man's success is really great and worthy, he must work to secure it; and behind the success which has secured those honors. In this life nothing worth having can be had for the asking; one must pay for whatever he gets, and pay in sterling coin. The moral order of the world rests on the same measure between work and reward. 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Dec. 27, 1890.

For the Michigan Farmer.
WEBSTER FARMERS' CLUB.

December 13th, the Club met at the homestead home of Mr. and Mrs. Wm. Watson. These people have lived to good old age, have seen the wilderness cleared away, and the improved land now brings forth abundantly to supply their needs. Through all the years of pioneer life they have not one bit forgotten hospitality, and spare no pains to make their guests feel at home.

The annual election of officers, as far as completed, is given: President, Alonso Oliver; Vice President, W. E. Boyden; Second Vice President, E. A. Nordman; Recording Secretary, selection not yet made; Corresponding Secretary, E. N. Ball; Treasurer, John Cushing. A rectification was given by Mary Backus and well deserved.

The question for discussion was "System in the Household—Is it Practicable?" This was the day for the ladies and was taken advantage of by them, with credit. While the gentlemen put in a word now and then in the discussion, we have only given the ladies' part.

Mrs. Oliver opened the discussion—Yes, I am in full accord with the question, am glad I am on the right side. I believe every woman thinks a house well kept is a blessing, and to a greater or less degree believes it necessary. We should study methods, plan for ourselves, think, make our heads serve our heels, and work will become lighter. System will aid in this and will give time for reading and study. Circumstances and surroundings have much to do, yet the old woman in the shoe must have had method to have gotten along so well and found her way out. Sufficient unto the day is the evil thereof. There must be a beginning and an ending. An intelligent, thoughtful method is necessary in every household. Would not lay down an iron clad rule, one that could not be swerved from, but would live as near to the rule as possible. A copartnership is quite essential in the best regulated household. The grown men can help amazingly by always cleaning their boots or shoes before entering the house. The boys, if any there be, can be taught to be tidy, to hang up coat and hat instead of throwing in a corner or on a chair for mother to pick up. There can be a great deal accomplished in this direction by not making work.

Mrs. Oliver wrote as follows:

The very able discussion by the male portion and a few of the opposite sex of this club at the last meeting made it very clear (?) to us that woman has her place in the world and must keep it, and that place was surely not in the mire of politics. She must be possessed of every virtue—meekness and docility. Indeed, rock the cradle while bringing up her children, and other forms of minuteness—if this last duty be entirely hers; but the outcome—the man might in some cases have been improved if the father had taken an active part in the upbringing of his offspring, I think—that is also a dangerous agent. The following may be given with good effect. Calomel, three drachms; tartar emetic, one drachm; mix and divide into three powders, one to be given for three successive nights, and follow with siccotina, two ounces; Jamaica ginger root, pulv., one ounce; mix and divide into ten powders; give one night and morning. Feed no corn or corn meal while giving these powders. A decoction of the leaves of *Vir Ursi*, one half pound to one gallon of soft water, dose, one ounce in the feed at night, will probably relieve the animal and restore healthy action of the kidneys.

Answer.—How John and Charles Wesley when at college at Oxford, found such rigid and severe rules for the regulation of their minds and studies, that it gave them the inclination of Methodists, and why not it not be just as appropriate for this class of workers?

Answer.—I like a certain amount of method less, but there are other and better things I like more. Don't let us make a god of our housework.

Mrs. Chamberlain thought the most important was to be done first. She once went to call on a sick person and found the domestic polishing the brass candlesticks because the doctor was coming, while instead she should have been caring for the sick. Some households are too prim. You feel while in them that you do not know whether to move or not for fear you will make wrong.

Mrs. Boyden.—Believe in having set days for certain work, yet can vary some if necessary. Think the men might wash their faces and hands and not wipe the dirt on the towel, as is often done.

The January meeting of the Club will be held at W. E. Boyden's, second Saturday in January, 1891. E. N. BALL, secretary.

Stock Notes.

M. A. B. CUMMINS, of Camden, Hillsdale Co., has purchased of the McClave Brothers, the registered Hereford bull Granger, No. 4292. He is one year old, and weighs 800 lbs.

SAYS THE OWSO Times: A. J. Beaman sold a load of pork in Owsos, Tuesday. Several Durro Jersey pigs, four months old, weighed 130 pounds each, or more than one pound per head of dressed pork.

TOM STEVENS shipped a calf to Buffalo two weeks ago, six weeks old, which weighed 305 pounds and brought eight cents per pound. Tom says it was the best calf he ever shipped or saw. He was raised by Mr. Shultz, five miles west of Fremont.—Reading Telephone.

JOSEPH LUKE, of Camden, has purchased of the McClave Brothers the two year old registered Hereford bull Vassar K., No. 3825. It must be that farmers in Hillsdale County are thinking of growing some beef. It is about time more of them were starting in the same direction.

THE Fowlerville Review reports a pig seven months and three weeks old whose dressed weight was 2.3 lbs. The breed was not mentioned, so we presume he was of no particular breed. A Wayne County Frenchman once had an excellent record for duck shooting. He was asked one day what his breeding was. He answered, "No breed—just dog." We suppose the Fowlerville porker was "No breed—just hog."

"HIGHWAYmen who present pistols and demand your purse; petty thieves who steal your hens and hams; manufacturers and merchants who make you pay for the worthless and damaging materials with which they adulterate their goods; milkmen who water and chalk their milk; farmers who sell balky, wind-broken horses for sound ones; fruit-growers who put defective apples and pears in the middle of the barrel and take pay for first-class fruit—all of these alike belong to the fraternity of thieves," says the New York Tribune.

Veterinary Department

Conducted by prof. Robert Jennings, Veterinary Surgeon. Professional advice through the columns of the Michigan Farmer to all regular subscribers and to those who desire to receive it free. Those who desire to receive it free, send a stamp and a dollar.

DETROIT WHOLESALE MARKET.

DETROIT, December 26, 1890.

FOUL.—Michigan brands are lower; but Minnesota are unchanged. Quotations on car lots are as follows:

Michigan roller process..... 4 65 20
Michigan patents..... 5 05 20
Minnesota, bakers..... 4 25 20
Minnesota, patent..... 4 00 20
Hays..... 4 00 20
Minneapolis Bakers' grades, No. 2..... 4 00 20

WHEAT.—The market has been moving steadily downwards all week, on both spot and futures, and does not show much strength at decline. The monetary stringency is affecting the market seriously. Chicago, New York and St. Louis were all lower yesterday. Quotations at the close yesterday were as follows: No. 1 white 94c; No. 2 white 89 1/2c; No. 3 white, 80c; No. 2 red, 85c; No. 3 red, 89c. Since start it is in condition. The action of his hind legs are as though the cords hindered the moving, or free use of his limbs. His legs do not jerk like spring-halts, but move as though the cords of his legs caught on the joint until he made an effort to lift them, and not free as is natural with a young horse. This has commenced about ten months old. There was no swelling of the hoof joint, until a few days ago, but for a week have been feeding gentian, ginger, saltpetre, sulphate iron, dax-seed meal, equal parts for a few days. Any information in regard to his case will be thankfully received.

A SUBSCRIBER.

Answer.—The trouble with your horse, from the symptoms as described, we are inclined to diagnose as rheumatism, or cramp of the motor muscles of the legs, for which we prescribe the following: Barbados aloes, pulverized, two ounces; chlorate of potassa, pulv., one ounce. Mix well together and divide into twelve powders; give one in the feed, or mix with water to a paste and smear on the tongue night and morning. When the powders have been given, follow with colicbom root, pulv., and salsify acid, of each two ounces; mix and divide into ten powders; give one at night in the feed or on the tongue. Give no corn or corn meal to eat, and give none but good clean and sweet hay. Keep in a clean dry stable, and give moderate exercise, and rub the legs well with coarse (clean) towels. Report to us in a couple of weeks.

GRENAD HEAL in a Horse.

CADMUS, Dec. 15, 1890. Veterinary Editor of the Michigan Farmer.

I have a bay mare, seven years old, that when in a stall, for anterior leg, runs from stall to stall, to foot, crack and run some below fetlock joint; has been worse than common this winter; swelling goes down when driven. She has a box stall to run in all the time. Have given her some blue vitrol. If you can tell me anything to do for her will oblige a reader of the FARMER.

N. R.

Answer.—From the description of the symptoms as given in the accompanying letter, we diagnose the disease in your mare as greasy heels. Mares more than horses are subject to its attacks. In the early stage of the disease the animal shows signs of weak-

ness; occasionally the respiration becomes labored; tussitude follows; the legs begin to swell, leaving the impression of the fingers in the skin when pressed upon; the membrane of the nose (schindleria) paler than usual; pulse sluggish and sometimes intermittent. This condition is due to the inveterated condition of the blood. In this debilitated condition the patient requires good nutritious food, pure air and a light, clean stall, fresh water, and moderate exercise. In this case we will prescribe the following: Sulphate of iron, one ounce, pulv.; chloride of potassa, pulv., two ounces; Jamaica ginger root, pulv., one ounce; gentian root, pulv., two ounces; mix all together and divide into twenty doses; give one in the feed, or mix with syrup to a paste and smear on the tongue night and morning. Give moderate exercise. Keep in a dry well lighted stable, give no corn or corn meal to eat, but give good clean oats and hay. Blue vitrol (sulphate of copper) is a powerful stimulant, astringent, and must be used cautiously and in moderate doses.

Worms in Gelding.

BELDEN, Dec. 15, 1890. Veterinary Editor of the Michigan Farmer.

I have a gelding about two years of age which has not received any worming this summer; hair looked rough and he seemed to be weak; muscles would tremble; for a week or two he seemed to be doing a little better—but that is gaeling in fibs a little.

About a week ago was taken with severe pain, would try to make water and seemed better, but still does not act well; have seen worms pass him which were white and about 1/2 inches long, and there are white spots under his rectum. Now if you can tell me what to do for him will oblige a reader.

M. V. RICHARDS.

ANSWER.—It is difficult from the symptoms described to diagnose the disease or cause of trouble in your gelding satisfactorily. The presence of worms no doubt is the primary cause of the trouble. The remedies in these cases most to be relied upon are tartar emetic, calomel, arsenic, turpentine, sulphate of iron, arsenic, strichnina, etc. The latter, while more effective, is also a dangerous agent. The following may be given with good effect. Calomel, three drachms; tartar emetic, one drachm; mix and divide into three powders, one to be given for three successive nights, and follow with siccotina, two ounces; Jamaica ginger root, pulv., one ounce; mix and divide into ten powders; give one night and morning. Feed no corn or corn meal while giving these powders. A decoction of the leaves of *Vir Ursi*, one half pound to one gallon of soft water, dose, one ounce in the feed at night, will probably relieve the animal and restore healthy action of the kidneys.

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